

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/040956 A2

(51) International Patent Classification⁷:

G06F

(21) International Application Number:

PCT/EP2004/011434

(22) International Filing Date: 8 October 2004 (08.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

MI2003A001950 10 October 2003 (10.10.2003) IT

(71) Applicant (for all designated States except US):
AGOSTINO FERRARI S.P.A. [IT/IT]; Via Tiraboschi
48, I-24122 Bergamo (IT).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MIGLI, Carlo** [IT/IT];
Via del Pozzo, 8, I-23900 Lecco (IT).

(74) Agents: **BOTTERO, Claudio** et al.; Porta, Checcacci &
Associati S.p.A., Via Trebbia, 20, I-20135 Milano (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

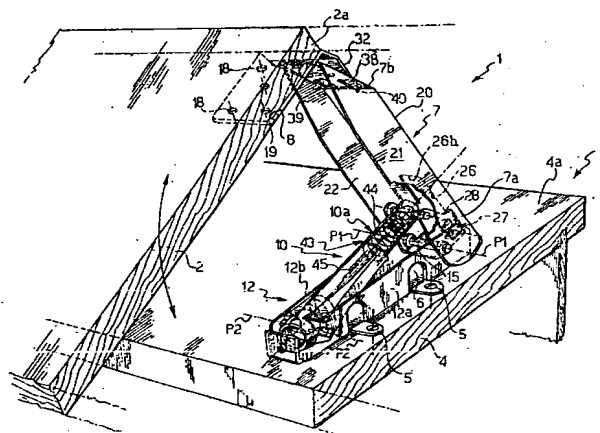
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **HINGE ASSEMBLY FOR THE ARTICULATED CONNECTION OF A VERTICALLY OPENING PANEL TO A FURNITURE ELEMENT**



(57) Abstract: A hinge assembly (1) is described for the articulated connection of a vertically opening panel (2) to a furniture element (3) between a closing position and an opening position in which the panel (2) is at least partially lifted with respect to the hinge assembly (1) and to the furniture element (3). More specifically, the hinge assembly (1) comprises: - a supporting base (6); - a lifting lever (7) operatively connected to the panel (2) and hinged to the supporting base (6) about a pivoting axis (P1-P1) between the closing and opening positions of the panel (2); - a balancing device (10) acting on the lifting lever (7) to at least partially counterbalance the weight of the panel (2) during rotation of the lever (7) about the pivoting axis (P1-P1). According to the invention, in the mounting position of the hinge assembly (1) the pivoting axis (P1-P1) of the lifting lever (7) and the balancing device (10) are positioned above an upper surface (4a) of the furniture element (3).

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/040956 A3

(51) International Patent Classification⁷: **E05F 1/12**,
E05D 5/06, E05F 15/12

(21) International Application Number:
PCT/EP2004/011434

(22) International Filing Date: 8 October 2004 (08.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
MI2003A001950 10 October 2003 (10.10.2003) IT

(71) Applicant (for all designated States except US):
AGOSTINO FERRARI S.P.A. [IT/IT]; Via Tiraboschi
48, I-24122 Bergamo (IT).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MIGLI, Carlo [IT/IT];
Via del Pozzo, 8, I-23900 Lecco (IT).

(74) Agents: BOTTERO, Claudio et al.; Porta, Checcacci &
Associati S.p.A., Via Trebbia, 20, I-20135 Milano (IT).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

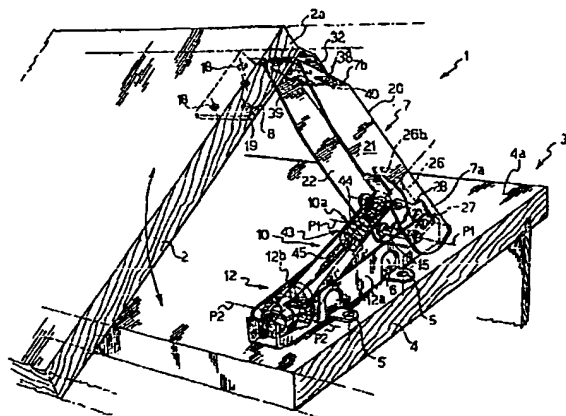
Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
21 July 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: HINGE ASSEMBLY FOR THE ARTICULATED CONNECTION OF A VERTICALLY OPENING PANEL TO A FUR-
NITURE ELEMENT



(57) Abstract: A hinge assembly (1) is described for the artic-
ulated connection of a vertically opening panel (2) to a furniture
element (3) between a closing position and an opening position
in which the panel (2) is at least partially lifted with respect to
the hinge assembly (1) and to the furniture element (3). More
specifically, the hinge assembly (1) comprises: - a supporting
base (6); - a lifting lever (7) operatively connected to the panel
(2) and hinged to the supporting base (6) about a pivoting axis
(P1-P1) between the closing and opening positions of the panel
(2); - a balancing device (10) acting on the lifting lever (7) to at
least partially counterbalance the weight of the panel (2) during
rotation of the lever (7) about the pivoting axis (P1-P1). Ac-
cording to the invention, in the mounting position of the hinge
assembly (1) the pivoting axis (P1-P1) of the lifting lever (7)
and the balancing device (10) are positioned above an upper
surface (4a) of the furniture element (3).